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11. (Amended) A method for selectively treating an angioproliferative condition which comprises contacting a vasculature supplying a biological structure affected by said angioproliferative condition with an angiostatically effective amount of a protease.

12. (Amended) The method according to claim 11 wherein the basolateral surface of said vasculature is contacted with the protease.

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16. (Amended) The method according to claim T5 wherein said protease is PrtP, HagA, other proteinase, a HagArep peptide, a fragment or active site thereof or DNA.

Please add the following new claims:

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21. (New) A composition for treatment or prevention of an angioproliferative condition comprising a pharmaceutically effective amount of a proteinase and an excipient for administration to a patient afflicted with said angioproliferative disorder.

22. (New) The composition according to claim 21 wherein said angioproliferative condition is a carcinoma, sarcoma, melanoma, ocular retinopathy, retrolental fibroplasias, psoriasis, angiofibromas, endometriosis, hemangioma, rheumatoid arthritis, capillary proliferation within atherosclerotic plaque, or a combination of such disorders.

- 23. (New) The composition according to claim 21 wherein said proteinase is derived from a bacterium.
- 24. (New) The composition according to claim 23 wherein said bacterium is *Porphyromonas gingivalis*.

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25. The composition according to claim 24 wherein said proteinase is PrtP, HagA, other

P. gingivalis proteinase, a HagArep peptide, a fragment or active site thereof, or DNA.

26. (New) A method for potentiating the effects of a chemotherapeutically effective agent

which comprises co-administering said chemotherapeutically effective agent in the

presence of a protease effective to disrupt cell-cell adhesion, cell-matrix adhesion, or

both.

27. (New) A method for preventing the implantation or sustenance of a fertilized ovum

which comprises administering an angiostatically effective amount of a proteinase to a

person in whom such preventing is required, sufficient to prevent formation of new

vasculatuer required for implantation or sustenance of said fertilized ovum.

28. (New) A method for inhibiting vascular endothelial cell migration which comprises

contacting vascular endothelial cells with a molecule selected from the group consisting

of cysteine proteinase, HagA protein, HagA peptide, HagA-specific enzymatic activity,

HagA active site mimetic, HagA analog, and combinations thereof or DNA.

29. (New) A method for reducing cell-cell adhesion, cell-matrix adhesion, or both, which

comprises contacting cells, matrix or both with an effective amount of a molecule

selected from the group consisting of a cysteine proteinase, HagA protein, HagA peptide,

HagA-specific enzymatic activity, HagA active site mimetic, HagA analog, and

combinations thereof or DN

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